AMENDMENTS TO THE CLAIMS

This listing replaces all prior version and listing of claims in the application:

1. (Original) A method of identifying a modulator of a TGR4 polypeptide that has G-protein coupled receptor activity and (A) comprises at least 70% amino acid sequence identity to SEQ ID NO:4, (B) comprises at least 20 contiguous amino acids of SEQ ID NO:4, or (C) comprises the amino acid sequence of SEQ ID NO:4; wherein the method comprises:

contacting a compound with a recombinant TGR4 polypeptide; and determining the level of binding of nicotinic acid to the TGR4 polypeptide; comparing the level of binding in the presence of the compound to the level of binding in the absence of the compound.

- 2. (Original) The method of claim 1, wherein the step of determining the level of binding comprises detecting nicotinic acid binding in a competitive binding assay.
- 3. (Original) The method of claim 1, wherein the step of determining the level of binding comprises detecting an alteration in a nicotinic acid-induced TGR4 activity.
- 4. (Original) The method of claim 3, wherein the nicotinic acid-induced TGR4 activity is an increase in intracellular calcium.
- 5. (Original) A method of treating a patient with a TGR4-associated disorder, the method comprising administering a therapeutically effective amount of a compound identified using the method of claim 1.
- 6. (Original) The method of claim 5, wherein the TGR4-associated disorder is hyperlipidemia.
- 7. (Original) The method of claim 5, where the TGR4-associated disorder is a disorder of the immune system.

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8. (Original) A method of identifying a modulator of a TGR183 polypeptide that has G-protein coupled receptor activity and (A) comprises at least 70% amino acid sequence identity to SEQ ID NO:6, (B) comprises at least 20 contiguous amino acids of SEQ ID NO:6, or (C) comprises the amino acid sequence of SEQ ID NO:6; wherein the method comprises:

contacting a compound with a recombinant TGR183 polypeptide; and determining the level of binding of nicotinic acid to the TGR183 polypeptide in comparison to the level of binding in the absence of the compound.

- 9. (Original) The method of claim 8, wherein the step of determining the level of binding comprises detecting nicotinic acid binding in a competitive binding assay.
- 10. (Original) The method of claim 8, wherein the step of determining the level of binding comprises detecting an alteration in a nicotinic acid-induced TGR183 activity.
- 11. (Currently Amended) The method of claim → 10, wherein the nicotinic acid-induced TGR183 activity is an increase in intracellular calcium.
- 12. (Original) A method of treating a patient with a TGR183-associated disorder, the method comprising administering a therapeutically effective amount of a compound identified using the method of claim 8.
- 13. (Original) The method of claim 12, wherein the TGR183-associated disorder is hyperlipidemia.
- 14. (Original) A method of modulating a TGR4-associated disorder, the method comprising administering a compound identified using the method of claim 1.
- 15. (Original) A method of modulating a TGR4-associated disorder, the method comprising

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administering a compound that inhibits a nicotinic acid-induced TGR4 activity, but not nicotinic acid binding to TGR4.

- 16. (Original) The method of claim 15, wherein the compound is an antibody.
- 17. (Original) A method of modulating a TGR183-associated disorder, the method comprising administering a compound identified using the method of claim 8.
- 18. (Original) A method of modulating a TGR183-associated disorder, the method comprising administering a compound that inhibits a nicotinic acid-induced TGR183 activity, but not nicotinic acid binding to TGR183.
- 19. (Original) The method of claim 18, wherein the compounds is an antibody.